

Name\_\_\_\_\_

Date\_\_\_\_\_

CP Chemistry (Living)  
Chapter 1 and 2 pt 2 Study Guide

What are all the metric units that we have talked about thus far? Draw a chart that will help you remember them.

What units of measurement would you use to measure the following? Pick the best prefix for each measurement as well

Thickness of a staple\_\_\_\_\_

Distance from school to your house\_\_\_\_\_

Volume a soda can hold\_\_\_\_\_

Mass of a car\_\_\_\_\_

How would you convert between two units. Try the following (show all work)

25 cm =\_\_\_\_\_km

50g = \_\_\_\_\_dg

900 hm =\_\_\_\_\_km

677 L =\_\_\_\_\_cL

478 g =\_\_\_\_\_mg

90 dm =\_\_\_\_\_hm

Define Accuracy and Precision.

Explain whether the following series of numbers are accurate, precise, or both.  
Student's mass of object: 78.1 g 78.2 g 78.1 g 78.0 g  
Actual mass of object; 70.0 g

What is the formula for percent error? If the volume of an object is actually 520 mL and its volume is measured to be 500 mL, what is the percent error?

A student records the following masses of various samples of aluminum:

Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
6.44 mL	6.30 mL	6.70 mL	6.80 mL	6.55 mL

The average recorded mass is (SHOW WORK WITH UNITS):

The precision of the measurement is: (Note express this using + or – notation)

For the following calculations:

- the volume of a cylinder is  $\pi r^2 h$
- the volume of a cube is  $L \times W \times H$ .

The mass of stone was found to be 127.0 g. The initial water level in a graduated cylinder was found to be 5.00 mL, and when the stone was placed inside it rose to 53.0 mL. What is the density of the stone?

A cylinder has diameter of 1.2 cm and a height of 7.0 cm. What is the density of the cylinder if it has a mass of 65.0 g?

A block of copper ( $D = 8.94 \text{ g/mL}$ ) has a mass of 1500 g. If two of its dimensions are 15cm and 8cm, what is the third dimension?